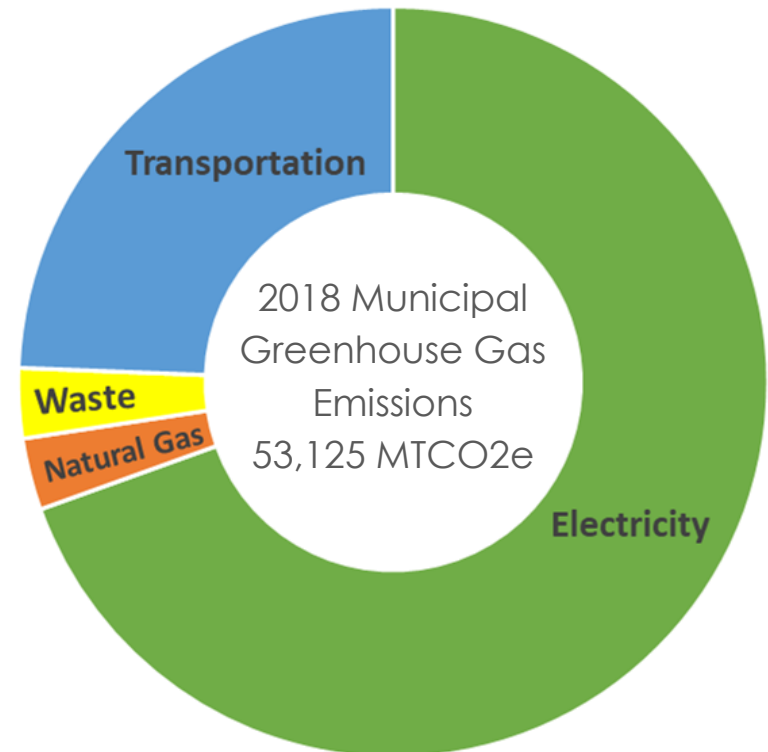
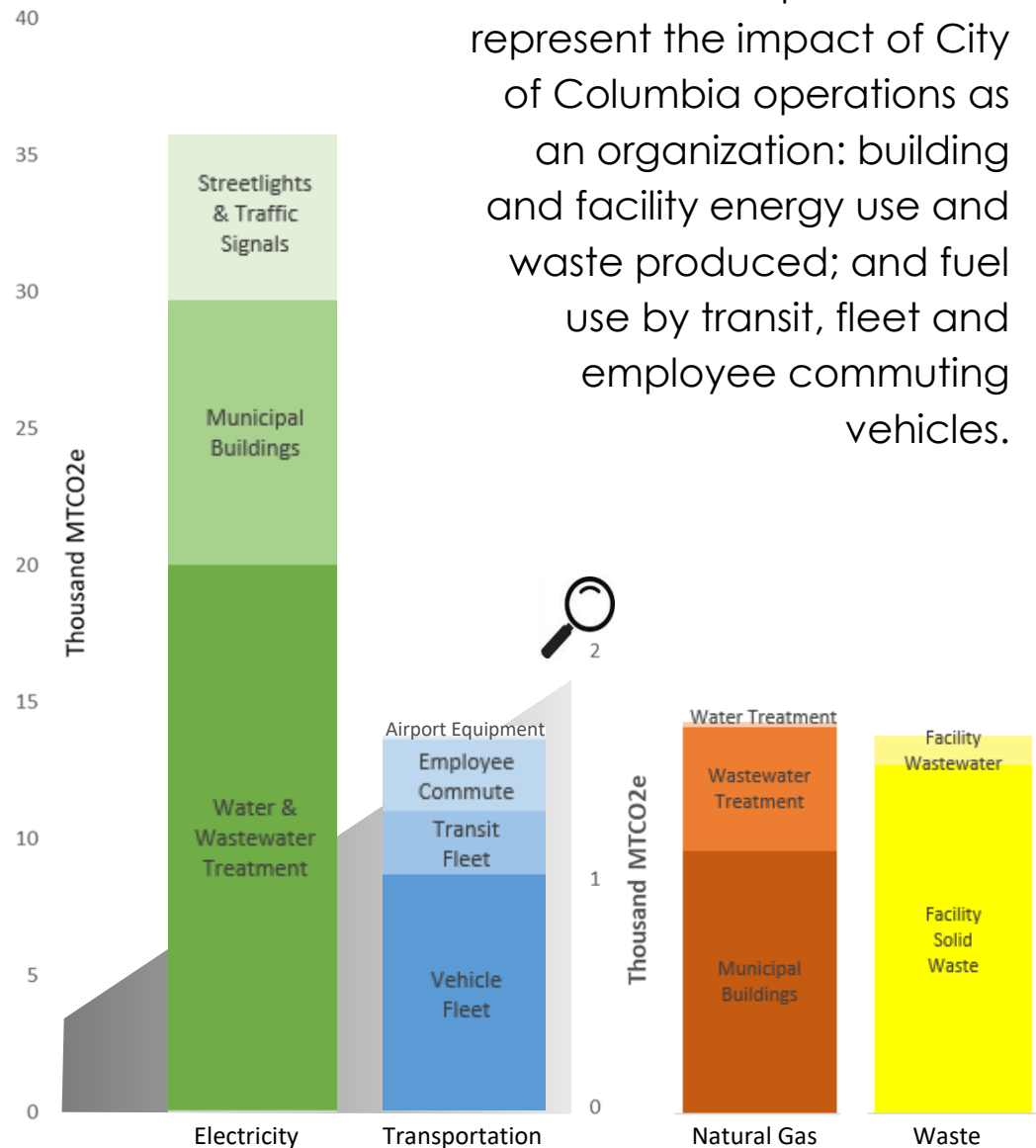


City of Columbia 2018 Municipal Emissions Report

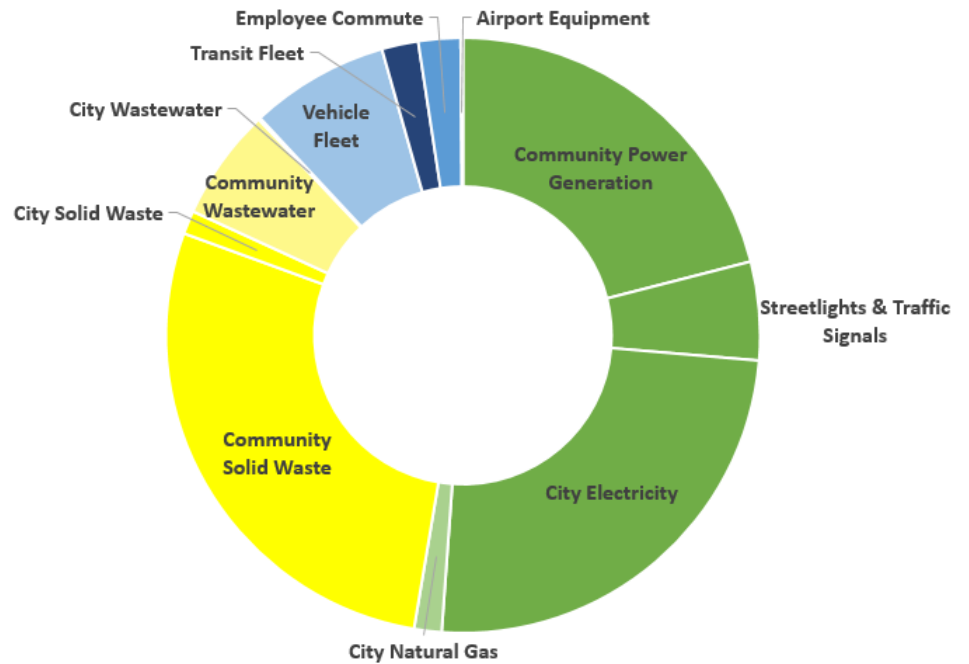
The emissions reported here represent the impact of City of Columbia operations as an organization: building and facility energy use and waste produced; and fuel use by transit, fleet and employee commuting vehicles.



This report includes emissions associated with energy use and waste produced by municipal operations only. Community energy production and waste treatment process emissions account for an additional 64,973 MTCO2e.

2018 Municipal Emissions Including Community Power Generation & Community Waste Processing Emissions

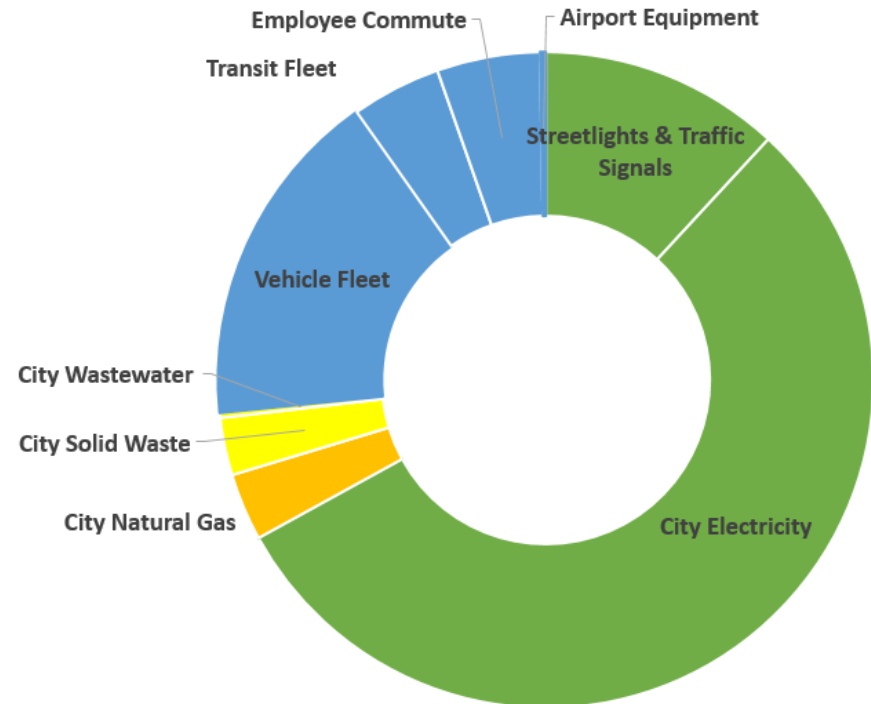
Total GHG Emissions by Sector & Source		MTCO ₂ e
Energy		62,168
	Community Power Generation	24,810
	Streetlights & Traffic Signals	6,312
	Facility Electricity	29,282
	Facility Natural Gas	1,764
	Airport Fuel Oil	0
Waste		41,800
	Community Solid Waste (Landfill)	32,981
	City Solid Waste	1,505
	Community Wastewater	7,182
	City Wastewater	132
Transportation		14,130
	Vehicle Fleet	8,933
	Transit Fleet	2,347
	Employee Commute	2,701
	Airport Equipment	149
TOTAL (Scopes 1, 2, & 3)		118,098



Columbia, MO provides a full range of services to the community, including electricity, solid waste and wastewater treatment. These services also contribute to the greenhouse gas emissions for Columbia as a community and a municipal organization. The above calculations include emissions from both municipal operations and community services provided. Emissions from the electricity generating assets controlled by the City of Columbia represent 24,810 MTCO₂e (21%) of the 2018 municipal inventory. Community solid waste and wastewater emissions total 40,163 MTCO₂e (34%) of the 2018 municipal inventory. Reporting total emissions from these municipally controlled waste and energy sources is important and will continue to inform broader process changes and our progress toward meeting reduction goals. In order to more directly report the impact of our daily operations on the municipal inventory, the analysis below removes emissions of non-municipal activities from the energy and waste sectors.

2018 Emissions from Municipal Operations

Total GHG Emissions by Sector & Source		MTCO ₂ e
Energy		37,358
Streetlights & Traffic Signals		6,567
Facility Electricity		29,898
Airport Fuel Oil		149
Facility Natural Gas		1764
Waste		1,637
Facility Solid Waste		1,505
Facility Wastewater		132
Transportation		14,130
Vehicle Fleet		8,933
Transit Fleet		2,347
Employee Commute		2,701
Airport Equipment		149
TOTAL (excluding non-municipal energy, waste and wastewater process emissions)		53,125



The distribution of City of Columbia's operational emissions across sectors resembles that of the Community's sector emissions. 70% of emissions come from facility energy, 27% from transportation and 3% from waste process emissions. Electricity usage by City facilities and buildings accounts for 78% of energy emissions and 55% of all operations emissions. Streetlights and traffic signals account for 17% of energy emissions and 12% of all operations emissions. Facility use of natural gas and fuel oil (airport use only) make up the remaining 5% of energy emissions and represent 4% of total operational emissions.

Municipal waste emissions are made up of wastewater at 8% and solid waste at 92%. They are the fraction of total process emissions from the municipal landfill and wastewater treatment plant estimated to be from municipal wastewater and solid waste.

Transportation emissions are comprised of Columbia Regional Airport equipment use, the City of Columbia's fleet and transit vehicles, and employee commuting activity. Fleet vehicle activities make up 63% of municipal transportation emissions and 27% of total operational emissions. Transit activities contribute 17% to transportation and 4% to total municipal operation emissions, and employee commute contributed 19% and 5%, respectively.